UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 09/19/2008

RICHMOND, HITCHCOCK, FISH & DOLLAR P.O. Box 2443

Bartlesville, OK 74005

EXAMINER
JOHNSON, EDWARD M

ART UNIT PAPER NUMBER

1793

DATE MAILED: 09/19/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735 557	12/12/2003	Joseph B. Cross		3022

TITLE OF INVENTION: COMPOSITION FOR THE REMOVAL OF HEAVY METALS FROM GASES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	12/19/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Alexandria, Virginia 22313-1450 or Fax (571)-273-2885

Note: A certificate of mailing can only be used for domestic mailings of the

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address and indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and or indicated unless correspondence address and or indicated unles maintenance fee notifications.

7590 99192008 RICHMOND, HITCHCOCK, FISH & DOLLAR P.O. Box 2443 Bartlesville, OK 74005			pap hav	ers, Each additional e its own certificate	paper, of mail	such as an assignment ing or transmission.	mission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.
			<u> </u>				(Depositor's name)
			<u> </u>				(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	:	ATTOR	NEY DOCKET NO.	CONFIRMATION NO.
10/735,557 TITLE OF INVENTION	12/12/2003 I: COMPOSITION FOR	THE REMOVAL OF HE	Joseph B. Cross EAVY METALS FROM C	ASES			3922
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0		\$1740	12/19/2008
EXAMINER		ART UNIT	CLASS-SUBCLASS	1			
JOHNSON, EDWARD M		1793	423-210000	•			
I. Change of correspondence address or indication of "Fee Address" (37 CFR 1.503). Change of correspondence address (or Change of Correspondence Address form PTOSB1/22) attached. The Address' indication (or "Fee Address" Indication form PTOSB4/7; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			2. For printing on the pasen front page, list (1) the annes of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm thaving as a member a registered attorney or agent) and the names of up to listed, no name will be printed, and listed, no name will be printed, and				
PLEASE NOTE: Un recordation as set fort (A) NAME OF ASSI	less an assignee is ident h in 37 CFR 3.11. Com GNEE		(B) RESIDENCE: (CITY	atent. If an assigne assignment. Y and STATE OR C	OUNT	RY)	ocument has been filed for
	<u> </u>						
4a. The following fee(s) Issue Fee	are submitted:	48	 Payment of Fee(s): (Ples	ase first reapply an	y previ	ously paid issue fee :	shown above)

☐ Publication Fee (No small entity discount permitted) 5. Change in Entity Status (from status indicated above)

Advance Order - # of Copies

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. □ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature Date Registration No. Typed or printed name

Payment by credit card. Form PTO-2038 is attached.

The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this for

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentially is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 manates to complete, including gathering, preparing, and within 50 cm and/or suggestion. For excluding gathering, preparing, and within 50 cm and/or suggestion. For excluding this bardon, should be sent to the chief Information Officer, U.S. Paters and Trademark Office. U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 2231-450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 2231-450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

(enclose an extra copy of this form).



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Bex 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 09/19/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,557	0/735,557 12/12/2003 Joseph B. Cross			3922
75	90 09/19/2008	EXAMINER		
RICHMOND, HI	TCHCOCK, FISH &	JOHNSON, I	EDWARD M	
P.O. Box 2443		ART UNIT	PAPER NUMBER	
Bartlesville, OK 74	1005	1702	•	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 741 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 741 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)
10/735,557	CROSS ET AL.
Examiner	Art Unit
Edward M. Johnson	1703

The MAILING DATE of this communication appears on the All claims being allowable, PROSECUTION ON THE MERITS IS (OR REM herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other NOTICE OF ALLOWABILITY is NOT A GRANT OF PATENT RIGHTS. of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPI	MAINS) CLOSED in this application. If not included appropriate communication will be mailed in due course. THIS This application is subject to withdrawal from issue at the initiativ
 This communication is responsive to the corrected brief filed on 6/2. 	<u>3/08</u> .
 The allowed claim(s) is/are <u>1-16</u>. 	
	ceived. Seived in Application No
* Certified copies not received:	
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this conoted below. Failure to timely comply will result in ABANDONMENT of tI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	
 A SUBSTITUTE OATH OR DECLARATION must be submitted. Not INFORMAL PATENT APPLICATION (PTO-152) which gives reason 	
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be subr (a) ☐ including changes required by the Notice of Draftsperson's Pate 1) ☐ hereto or 2) ☐ to Paper No./Mail Date (b) ☐ including changes required by the attached Examiner's Amendr Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) she each sheet. Replacement sheet(s) should be labeled as such in the header 6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIC attached Examiner's comment reparation REQUIREMENT FOR THE	ant Drawing Review (PTO-948) attached ment / Comment or in the Office action of build be written on the drawings in the front (not the back) of according to 37 CFR 1.121(d). DLOGICAL MATERIAL must be submitted. Note the
attautied Examiner's comment regarding REQUINER/ENT FOR THE	E DEPOSIT OF BIOLOGICAL WATERIAL.
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	Notice of Informal Patent Application Interview Summary (PTO-413),
3. ☐ Information Disclosure Statements (PTO/SB/08),	Paper No./Mail Date 7.
Paper No./Mail Date Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. Examiner's Statement of Reasons for Allowance
or Diological Material	9. Other

Application/Control Number: 10/735,557

Art Unit: 1793

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: The prior art does not disclose or fairly suggest vanadium on the claimed support composition wherein at least a portion of said vanadium has crystallite sizes of less than about 100 angstroms in the composition of claims 1 and 5-7.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 571-272-1352. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1793

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edward M. Johnson/ Primary Examiner Art Unit 1793

EMJ